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POWER SUPPLY

VOLTAGE REGULATED
POWER SUPPLY

MODEL SM 75-2
and SM 75-2M

SERIAL NO. C.4.0685.....

INSTRUCTION MANUAL

kepco inc.®

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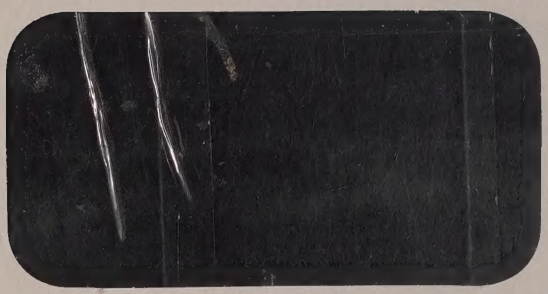

INSTRUCTION MANUAL

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TABLE OF CONTENTS

SECTION		PAGE NO.
A.	SPECIFICATIONS	
	I. ELECTRICAL AND PHYSICAL SPECIFICATIONS	A-1
	II. TERMINALS AND CONTROLS	A-2
	III. PROTECTIVE FEATURES	A-2
B.	BRIEF THEORY	B-1
	Block Diagrams	B-2A
C.	OPERATING PROCEDURES	
	Turn-On, and General Operation	C-1
	Remote Error Sensing	C-2

REFERENCE INDEX

Parts Lists
Schematic Diagrams
Dimensional Diagram

SPECIFICATIONS AND CONTROLS FOR MODELS SM 75-2 AND SM 75-2M

I. ELECTRICAL AND PHYSICAL SPECIFICATIONS:

.... DC OUTPUT VOLTAGE:
0-75 volts DC, continuously variable.

.... DC OUTPUT CURRENT:
0-2 amperes, continuous duty.

.... AC INPUT:
105-125 volts, 60 $\pm$ 1 cps; 4.0 amperes (max.)

.... REGULATION:
LINE: 0.01% for 105-125 v line change at any output voltage within specified range.

LOAD: 0.05% or 0.003 v, whichever is greater, for 0 to 2 amperes load change, at any output voltage within specified range.

.... RIPPLE: Less than 0.001 volts rms.

.... STABILITY:
Output voltage variation is less than 0.1% over a period of 8 hours, after unit has reached equilibrium.

.... OUTPUT IMPEDANCE:
Less than 0.02 ohm from DC to 100 cps.
Less than 0.005 ohm from 100 cps to 1 KC.
Less than 0.04 ohm + 0.4 μh from 1 KC to 100 KC.

.... RECOVERY TIME: 50 microseconds. Recovery time is defined as the time required for the output voltage to return to within 0.1 volts of the output voltage setting.

.... TEMPERATURE COEFFICIENT:
Output voltage changes less than 0.05% per degree C.

.... AMBIENT OPERATING TEMPERATURE:
-20°C to +50°C maximum. Protective circuit turns unit off when over-temperature condition occurs in pass elements. Recycling the power switch restores operation after reduction of temperature.

.... STORAGE TEMPERATURE:
-40°C to +85°C.

.... DIMENSIONS:
3-1/2" high x 19" wide x 13-7/8" deep (behind panel).

.... COLOR:
Kepco Standard Gray Hammertone.

.... METERS: (APPLIES ONLY TO MODEL SM 75-2M)
Voltmeter: 0-80 volts, 2-1/2".
Ammeter: 0-2 amps, 2-1/2".

II. TERMINALS AND CONTROLS:

.... (On front panel):
.... DC OUTPUT AND GROUND binding posts, clearly marked. Output terminals isolated from chassis; either positive or negative terminal may be grounded.
.... VOLTAGE CONTROL, continously variable, for setting output voltage.
.... POWER ON-OFF SWITCH, energizes power and auxiliary transformers.

.... (At rear of unit):
.... DC OUTPUT AND GROUND binding posts, clearly marked; either positive or negative terminal may be grounded.
.... REMOTE ERROR SENSING binding posts provide means of maintaining specified regulation directly at load. (Diagram and Procedure on P. C-2).

III. PROTECTIVE FEATURES:

.... FUSE PROTECTION:
.... POWER input fuse (ac) on front panel.
.... DC output fuse (ac) on front panel.
.... REFERENCE fuse (ac) protects internal circuitry.

.... OVERLOAD PROTECTION:
Provided by inherent current limiting action of Kepco "FLUX-O-TRAN" transformer. Output may be shorted momentarily without damage to unit. Continuous overload or short will blow DC FUSE.

.... OVER-TEMPERATURE PROTECTION:
Thermostat relay control turns unit off if temperature of pass elements exceeds safe limit. Relay is reset by interrupting input power with ON-OFF switch on front panel, or by disconnecting line cord from power source.

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SECTION B

BRIEF THEORY:

Two circuit schematic drawings titled "POWER UNIT" and "CONTROL UNIT" are included in the Reference Index of this instruction manual. These drawings contain designations corresponding to the capitalized terms in the following discussion.

Some basic functional relationships in this power supply are illustrated in block Diagram B-1 (Page B-2A).

The POWER UNIT includes:

DC SOURCES:

....MAIN SUPPLY - (consisting of a Kepco "Flux-O-Tran" transformer, full wave bridge rectifier, and capacitive filter) provides line regulated DC power for the output, via the PASS CIRCUITRY.

....AUXILIARY SUPPLIES: COLLECTOR SUPPLY (negative full wave rectified) for PASS CIRCUITRY driver stages not connected to MAIN SUPPLY; I_{CO} SUPPLY (full wave rectified) compensates for spurious biasing effects of collector leakage current; RETURN SUPPLY (full wave rectified) acts as leakage current path for series pass transistors and as bleed path to provide minimum operating current for pass transistors; CONTROL UNIT SUPPLY (full wave rectified).

PASS CIRCUITRY:

The power transistors which function as pass elements (i.e. are in series with the load) may be regarded effectively as variable resistors (or conductors) controlled by a CONTROL SIGNAL. The current "passed" by these elements is a function of the emitter-base bias. The CONTROL SIGNAL is applied to the base terminal; hence a negative CONTROL SIGNAL will aid the forward conduction of a PNP transistor while a positive CONTROL SIGNAL will reduce the forward conduction. In response to the CONTROL SIGNAL the pass elements effect a current and voltage distribution in the main DC loop which holds the output voltage constant.

The CONTROL UNIT includes:

REFERENCE CIRCUITRY:

The function of the REFERENCE CIRCUITRY is to maintain a precise, stable, voltage standard for the COMPARISON AMPLIFIER.

COMPARISON AMPLIFIER:

The COMPARISON AMPLIFIER is essentially a series of cascaded transistor amplifiers which boost the differential error signal produced in the COMPARISON BRIDGE to a level sufficient to drive the PASS CIRCUITRY. The COMPARISON AMPLIFIER is connected across the COMPARISON BRIDGE from the junction of the VOLTAGE CONTROL and the REFERENCE RESISTANCE to the junction of the REFERENCE DIODE and the negative output terminal (See Diagram on Page B-2A). This arrangement is similar to that of a null galvanometer across a Wheatstone bridge. Unbalance in the COMPARISON BRIDGE is amplified to produce a CONTROL SIGNAL of suitable magnitude and phase to effect corrective action by the PASS CIRCUITRY.

COMPARISON BRIDGE: (See Diagram B-2, Page B-2A).

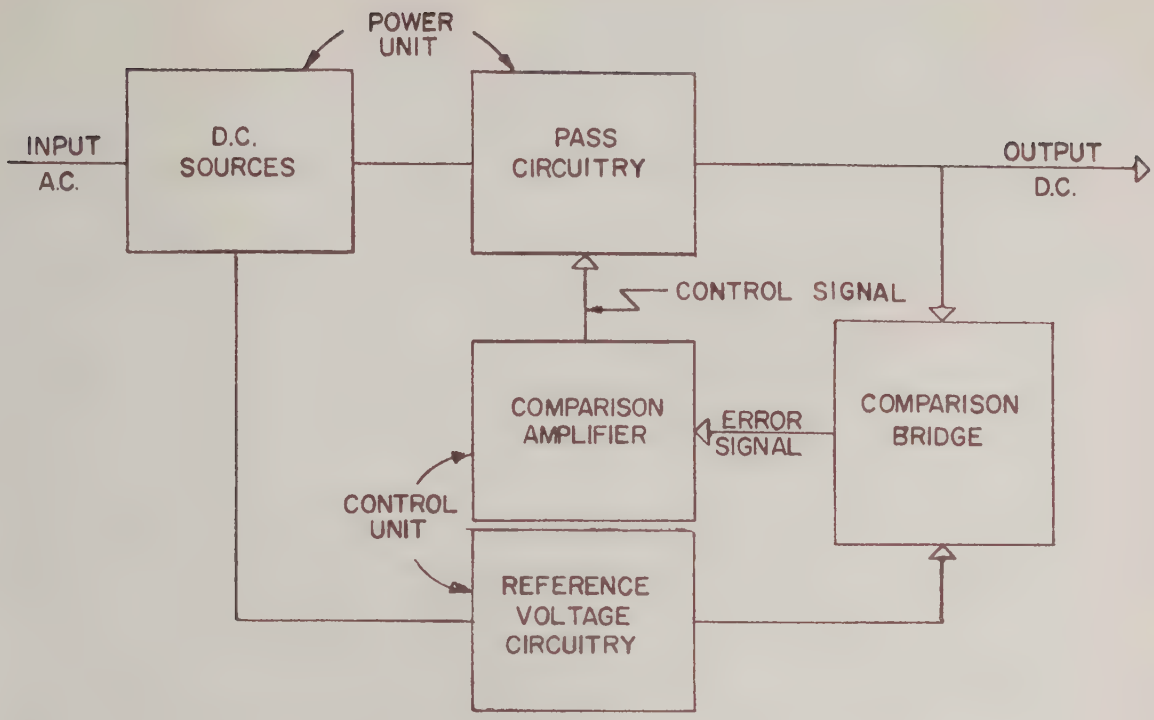
This bridge circuit implements the comparison between the OUTPUT VOLTAGE and the REFERENCE VOLTAGE. The signal produced by the comparison drives the COMPARISON AMPLIFIER.

Balance occurs in the Comparison Bridge when the following ratios are equal:

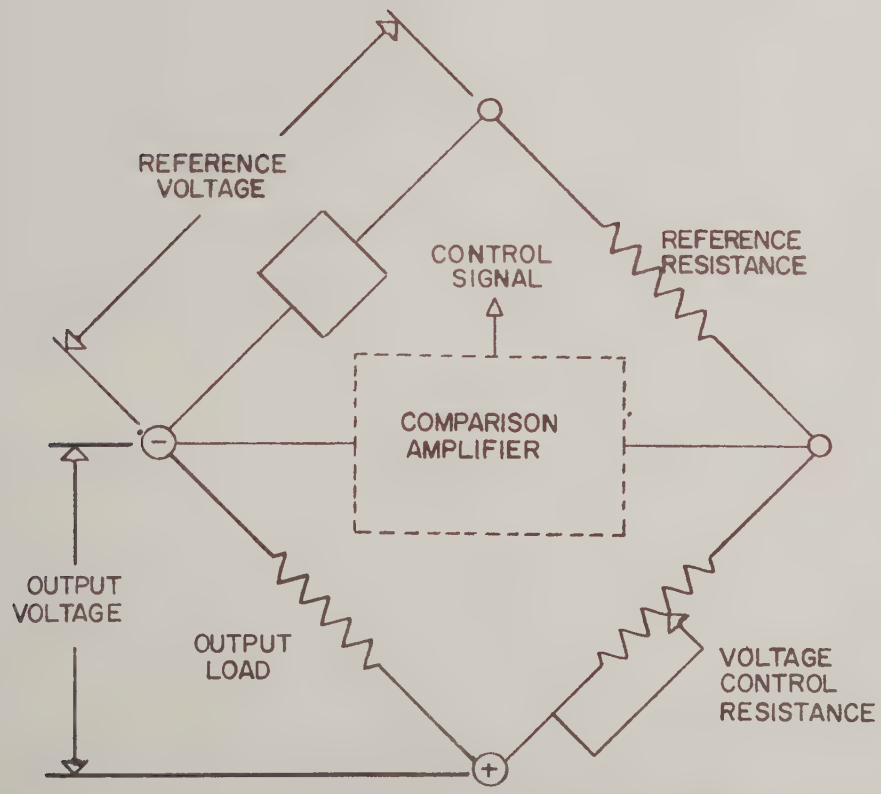
$$\frac{\text{Output Voltage}}{\text{Voltage Control Resistance}} = \frac{\text{Reference Voltage}}{\text{Reference Resistance}}$$

When, for example, the Comparison Bridge is unbalance by a decreasing output voltage drop across the load, it gives rise to a negative signal at the base of the COMPARISON FOLLOWER in the COMPARISON AMPLIFIER circuit. This signal is amplified in cascade and communicated to the pass elements as a negative base input aiding their forward conduction and consequently increasing the output voltage.

A bridge unbalance caused by an increasing output voltage produces, of course, a chain of oppositely biased circuit responses which reduce the voltage across the load.



(DIAGRAM B-1) *VOLTAGE REGULATED POWER SUPPLY*



(DIAGRAM B-2) *COMPARISON BRIDGE*

This power supply is shipped without any internal packing material; and may be put into operation immediately. It is designed for rack and for bench use. Carrying handles are provided on front panel.

....INTIAL "TURN - ON" PROCEDURE:

1. Adjust VOLTAGE CONTROL to approximate mid-range position.
2. With POWER ON-OFF switch set in "OFF" position, connect line cord to 115 v ac, 60 cps input power. If outlet is not polarized use 3 to 2 - prong adapter supplied with unit.
3. Set POWER ON-OFF switch to "ON" position.
4. Adjust VOLTAGE CONTROL to obtain desired output voltage.

....GENERAL OPERATION:

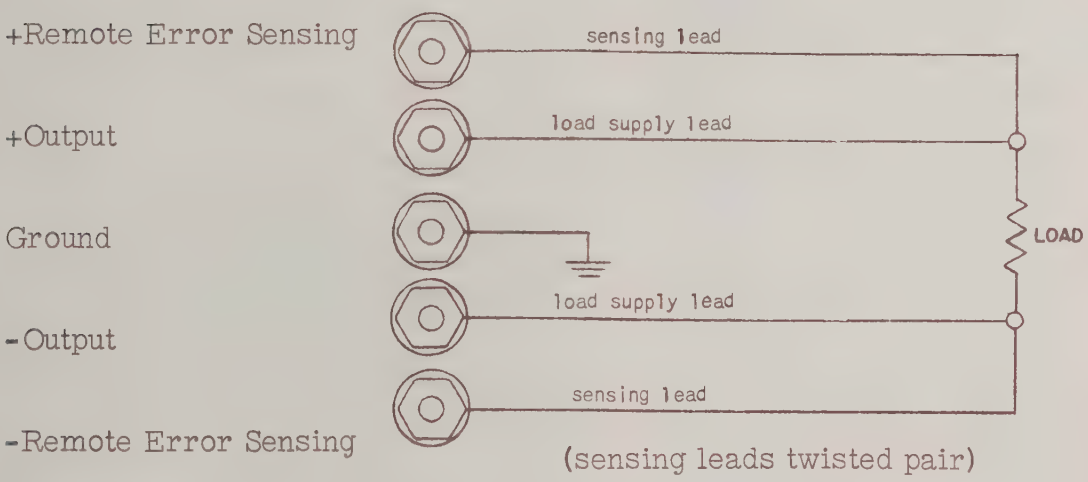
1. Once it has been determined that the unit is functioning satisfactorily, it is subsequently unnecessary to follow the INITIAL TURN-ON PROCEDURE.
2. The VOLTAGE CONTROL may be left fixed at any setting and the power turned "ON" and "OFF" without any harmful effects.

....MAINTENANCE AND REPAIR:

1. Under normal operating conditions, no mechanical maintenance of any kind should be required. Conservatively rated electrical components assure long trouble-free operating life.
2. Exceptional component accessibility, provided by resistor board construction and plug-in sub-assemblies, facilitates servicing, should it be required. It is emphatically recommended that trouble-shooting be handled by personnel highly familiar with transistor circuitry, - preferably with experience in closed-loop designs.
3. This unit should not be returned to the manufacturer without proper authorization and shipping instructions. In any correspondence with the factory regarding repair, the model, serial number, and symptoms of malfunction must be included.

REMOTE ERROR SENSING OPERATION

(Terminal Connections)



(Procedure)

1. With AC input power disconnected, remove jumpers between plus and minus Output terminals and Remote Error Sensing terminals on the rear of the unit.

2. Using twisted pair wire, connect sensing leads from positive and negative Remote Error Sensing terminals to the load (observing polarities).

3. Using twisted pair wire, connect load supply leads from positive and negative Output terminals.

IMPORTANT NOTE: This unit should not be operated with Remote Error Sensing if the voltage drop across the load supply leads exceeds 0.5 volt (maximum) per lead at maximum rated output current.

REPLACEMENT PARTS LIST

POWER SUPPLY MODEL SM75-2,-2M,-2MX Code 4-2363

SCHEMATIC NO.	QTY.	DESCRIPTION	MFRS. NAME & PART NO. (See Note)	KEPCO PART NO.
B201	1	Motor Fan	Barber-Coleman	148-0006
C201	1	Capacitor,Electrol, Can 2250 µf, 110 V	Sangamo DCM	117-0285
C202	1	Capacitor,Electrol, Can 4 K, µf, 110 V	Sangamo DCM	117-0286
C203	1	Capacitor,Electrol, Can 2 µf, 660 V	General Elec. 49F2322	117-0169
C204	1	Capacitor, Mylar 1 µf, 200 V	Hopkins Eng. 1P2MK	117-0207
C301	1	Capacitor,Ceramic 0.1 µf, 500 V	Sprague 41 C92	117-0087
C302	1	Capacitor,Ceramic 0.03 µf, 200 V	Sprague 192P3392	117-0291
C303	1	Capacitor,Electrol.Pigtail 50 µf, 150 V	Industrial Cond 10B936	117-0127
C304	1	Capacitor,Electrol.Pigtail 10 µf, 150 V	Industrial Cond I0B912RM	117-0147
C401	1	Capacitor,Electrol,Pigtail 350 µf, 50 V	Industrial Cond 1B844	117-0114
C402	1	Capacitor,Electrol,Pigtail 100 µf, 200 V	Industrial Cond 20B317 RM	117-0222
C403	1	Capacitor,Electrol.Pigtail 500 µf, 50 V	Industrial Cond 1B1163RM	117-0221
C404	1	Capacitor,Electrol,Pigtail 500 µf, 50 V	Industrial Cond 1B1163RM	117-0221
C405	1	Capacitor,Ceramic 0.05 µf, 500 V	Sprague 36C142A1	117-0163
C406	1	(Same as C405)		
CR301	1	Rectifier,Silicon,Pigtail	Automatic PT-5	124-0028
CR401	1	Rectifier,Silicon,Pigtail	Electronic Devices	124-0133
CR402	1	(Same as CR401)		
CR403	1	Rectifier,Silicon,Pigtail	Automatic PT-5	124-0028
CR404	1	(Same as CR403)		

REPLACEMENT PARTS MAY BE ORDERED FROM KEPCO, INC. ORDERS SHOULD INCLUDE KEPCO PART NUMBER AND DESCRIPTION.

PLEASE NOTE: THE MANUFACTURER'S NAME AND PART NUMBER LISTED FOR EACH ITEM ON REPLACEMENT PARTS LISTS, REPRESENTS AT LEAST ONE SOURCE FOR THAT ITEM AND IS LISTED SOLELY FOR THE CONVENIENCE OF KEPCO EQUIPMENT OWNERS IN OBTAINING REPLACEMENT PARTS LOCALLY. WE RESERVE THE RIGHT TO USE EQUIVALENT ITEMS FROM ALTERNATE SOURCES. KEPCO, INC.

SCHEMATIC NO.	QTY.	DESCRIPTION	MFRS. NAME & PART NO. (See Note)	KEPCO PART NO.
CR405-408	4	Rectifier,Silicon,Pigtail	Electronic Devices	124-0133
F101	1	Fuse, Instantaneous 4 a, 250 v	Bussman MTH-4	141-0003
F102	1	Fuse, Slow Blow 4 a, 125 v	Bussman MDX-4	141-0035
F401	1	Fuse, Instantaneous 2 a, 250 v	Bussman AGC-2	141-0012
*M101	1	Meter 80VDC, 2½"	General Elec. 8DW91V231AS2	135-0189
*M102	1	Meter 2 ADC, 2½"	General Elec. 8DW91A225BR2	135-0154
PL101	1	Pilot Light	General Elec. NE-51	153-0024
Q301	1	Transistor,PNP	Tung-Sol	**119-0022
Q302	1	Transistor,PNP	Delco	**119-0034
R101	1	Resistor,Variable,Wire,Wd 10 K ohm, 1.6 W	General Radio 971-N	115-0268
R201	1	Resistor,Fixed,Power,Ribbin 1 ohm, 40 W, 5%	Hardwick Hindle 2BR35-1 ohm	115-1030
R202	1	Resistor,Fixed,Power,Strip 1.5 K ohm, 30 W,5%	Ward Leonard 30S1500	115-0981
R203	1	(Same as R201)		
R204	1	Resistor,Fixed,Power,Axial 2.5 K,10 W, 5%	Ward Leonard 10X2500	115-0318
R205	1	Resistor,Fixed,Power,Axial 50 ohm, 20 W, 5%	Ward Leonard 20S50	115-0777
R206	1	Resistor,Fixed,Power,Axial 2.5 K, 5 W, 5%	Ward Leonard 5X2500	115-0310
R207	1	Resistor,Fixed,Molded 47ohm, ½ W, 10%	Allen Bradley EB4701	115-0718
R301	1	Resistor,Fixed,Molded 5.6 K, ½ W, 5%	Allen Bradley EB5625	115-0559
R302	1	Resistor,Fixed,Molded 1 K, 1 W, 5%	Allen Bradley GB1025	115-0960
R303	1	Resistor,Fixed,Power,Axial 400 ohm, 3 W, 5%	Ward Leonard 3X400	115-0564

*Metered Models Only
**See Field Replacement Page

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SCHEMATIC NO.	QTY.	DESCRIPTION	MFRS. NAME & PART NO. (See Note)	KEPCO PART NO.
R304	1	Resistor,Fixed,Molded 100 ohm, ½ W, 5%	Allen Bradley EB1015	115-0341
R305	1	Resistor,Fixed,Axial 50 ohm, 3 W, 5%	Ward Leonard 3X50	115-0641
R306	1	Resistor,Fixed,Molded 150 K ohm, ½ W, 5%	Allen Bradley EB1545	115-0243
R307	1	Resistor,Fixed,Molded 390 ohm, ½ W, 5%	Allen Bradley EB3915	115-0883
R308	1	Resistor,Fixed,Power,Axial 15 ohm, 5 W, 5%	Ward Leonard 5X15	115-1012
R309	1	Resistor,Fixed,Molded 47 ohm, 1 W, 5%	Allen Bradley GB4705	115-0999
R310	1	(Same as R305)		
R311	1	Resistor,Fixed,Molded 330 K ohm, ½ W, 5%	Allen Bradley EB3345	115-0250
R312	1	Resistor,Fixed,Power,Axial 1 K, 5 W, 5%	Ward Leonard 5X1000	115-0512
R313	1	Resistor,Fixed,Molded 10 ohm, ½ W, 10%	Allen Bradley EB1001	115-0502
R320	1	Resistor,Fixed,Axial 2.5 K, 3 W, 5%	Ward Leonard 3X2500	115-0469
S101	1	Switch,Toggle SPST 15 a, 125 v	Carling AA252-63XKEP2	127-0107
T101	1	Transformer,Variable 0-75 v, 3 a	Chmite Mfg. VT2	175-0403
T201	1	Transformer,Flux-O-Tran	Kepco Magnetics 100-1205 A	100-1205A
T401	1	Transformer	Kepco Magnetics 100-1179B	100-1179B
Transistor Assembly:				
A901	1	Rectifier Assembly DB-6F20K	Kepco Inc.	109-0021
	Includes the following:			
	4ea.	Rectifier Silicon Stud	Int'l Rectifier 6F20K	124-0086

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SCHEMATIC NO.	QTY.	DESCRIPTION	MFRS. NAME & PART NO. (See Note)	KEPCO PART NO.
Transistor Assembly Cont.				
A902	1	Pass Transistor Assembly EO2TC/SP67	Kepco Inc.	110-0153
	Includes the following:			
	lea.	Resistor,Fixed,Power,Axial 0.2 ohm, 3 w	Ward Leonard 7/16"-Q-0.2	115-0450
	lea.	Transistor, PNP	Motorola	**119-0036
	lea.	Switch, Thermostat NC	Chatham DRSCORP73C	127-0093
A903	1	Pass Transistor Assembly EO.2/SP67A/1N1369	Kepco Inc.	110-0154
	Includes the following:			
	lea.	Zener Diode	Hoffman 1N1319	121-0020
	lea.	Resistor,Fixed,Power,Axial 0.2 ohm, 3 w	Ward Leonard 7/16"-Q-0.2	115-0450
	lea.	Transistor, PNP	Motorola	**119-0035
A904	1	Driver Transistor Assembly FO/441-10	Kepco Inc.	110-0128
	Includes the following:			
	lea.	Transistor, PNP	Delco	**119-0016

**See Field Replacement Page

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kepco inc. ® REPLACEMENT PARTS LIST

MODEL TRAM 38 CONTROL UNIT ASSEMBLY Code 12-1663

SCHEMATIC NO.	QTY.	DESCRIPTION	MFRS. NAME & PART NO. (See Note)	KEPCO PART NO.
C1	1	Capacitor, Mylar 0.22 µf, 200 v, 20%	Good All 620S22402W	117-0107
C2	1	Capacitor, Ceramic 0.1 µf, 500 v, 20%	Sprague Electric 41C92	117-0087
C3	1	Capacitor, Electrolytic, Pigtail 25 µf, 25 v, 10%	Industrial Cond. 1B1063	117-0105
C4	1	Capacitor, Mylar 0.4 µf, 200 v, 10%	Hopkins Eng. P42MK	117-0128
CR1, 2	2	Rectifier, Silicon, Pigtail	Electronic Devices	124-0133
Q1, 3, 4, 5	4	Transistor, NPN	General Transistor	**119-0024
Q2	1	Transistor, PNP	Tung Sol	**119-0022
Q6	1	Transistor, PNP	Delco	**119-0034
R1	1	Resistor, Fixed, Molded 100 ohm, 1 w, 10%	Allen Bradley GB1011	115-0002
R2	1	Resistor, Fixed, Molded 10 ohm, 1/2 w, 10%	Allen Bradley EB1001	115-0502
R3	1	Resistor, Fixed, Molded 4.7 K ohm, 1/2 w, 10%	Allen Bradley EB4721	115-0467
R4	1	Resistor, Fixed, Molded 240 ohm, 1/2 w, 5%	Allen Bradley EB2415	115-0484
R5	1	Resistor, Fixed, Molded 620 ohm, 1/2 w, 5%	Allen Bradley EB6215	115-0565
R6	1	Resistor, Fixed, Molded 82 ohm, 1/2 w, 10%	Allen Bradley EB8201	115-0941
R7	1	Resistor, Fixed, Molded 2.7 K ohm, 1/2 w, 10%	Allen Bradley EB2721	115-0560
R8	1	Resistor, Fixed, Molded 3.9 K ohm, 1/2 w, 5%	Allen Bradley EB3925	115-0808
R9, 10	2	Resistor, Fixed, Power, Axial 500 ohm, 3 w, 5%	Ward Leonard 3X500	115-0459
R11, 15	2	Resistor, Fixed, Molded 560 ohm, 1/2 w, 5%	Allen Bradley EB5615	115-0888
R12	1	Resistor, Fixed, Molded 13 K ohm, 1/2 w, 5%	Allen Bradley EB1335	115-0920
R13	1	Resistor, Fixed, Molded 1.8 K ohm, 1/2 w, 10%	Allen Bradley EB1821	115-0473
R14	1	Resistor, Fixed, Molded 750 ohm, 1/2 w, 5%	Allen Bradley EB7515	115-0566

**See Field Replacement Page

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MODEL TRAM 38 CONTROL UNIT ASSEMBLY Code 12-1663

SCHEMATIC NO.	QTY.	DESCRIPTION	MFRS. NAME & PART NO. (See Note)	KEPCO PART NO.
R16	1	Resistor, Fixed, Molded 2.2 K ohm, 1/2 w, 10%	Allen Bradley EB2221	115-0466
R17	1	Resistor, Fixed, Molded 47 ohm, 1 w, 10%	Allen Bradley GB4701	115-0005
R18	1	Resistor, Fixed, Molded 10 ohm, 1 w, 10%	Allen Bradley GB1001	115-0052
R19	1	Resistor, Variable, Multiturn 1 K ohm, 0.5 w, 10%	Bourns 3067S-1-102	115-0739
R20	1	Resistor, Fixed, Molded 56 K ohm, 1/2 w, 5%	Allen Bradley EB5635	115-0255
RD1	1	Zener Diode	Transitron SV125	121-0028

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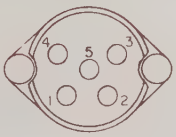
FIELD REPLACEMENT LIST

Kepco Part No.	Description	Recommended Replacement MFR.	Mfr. No.
119-0003 119-0016	Transistor PNP	Delco	2N174
119-0022	Transistor PNP	Tung-Sol	2N382 2N1707
119-0034	Transistor PNP	Delco	2N1172
119-0035, 0036,0037	Transistor PNP	Motorola Clevite	2N1167 CTP 3553
119-0048	Transistor Unijunction	General Electric	2N1671A
119-0020	Transistor PNP	RCA	2N398A
119-0038	Transistor NPN	Transitron	ST29
119-0004	Transistor PNP	Delco	2N277
119-0024	Transistor NPN	General Inst. RCA Sylvania	2N1605 2N388 2N1308
119-0049	Transistor PNP	Delco	2N669
119-0054	Transistor NPN	General Electric	2N338
119-0055	Transistor PNP	Sperry	2N329A

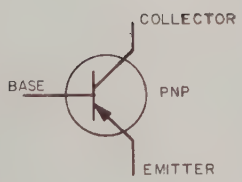
PCB-1 V/I CONTROL BOARD

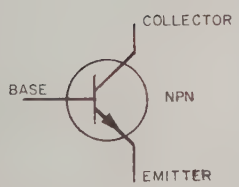
PCB-2 SCR CONTROL BOARD

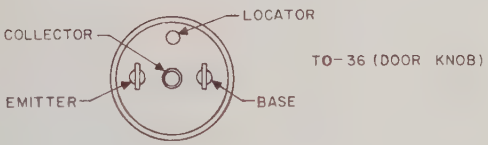
PLUG IN DRIVER AND PASS ASSEMBLIES - CHASSIS SOCKET VIEW

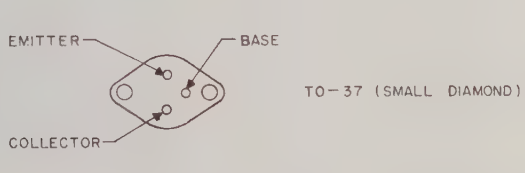


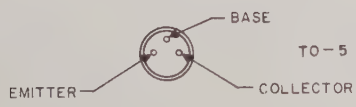
TRANSISTORS



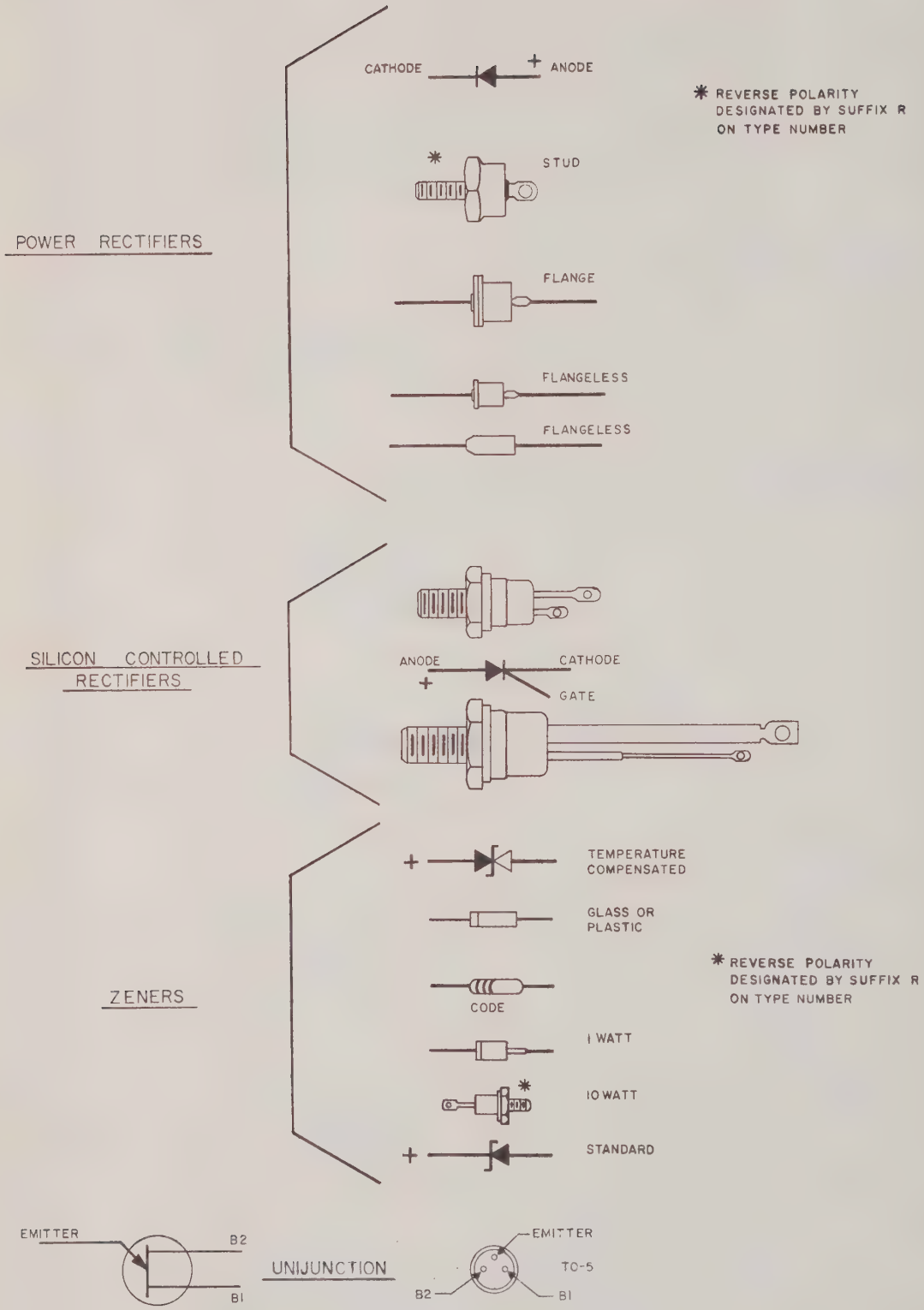




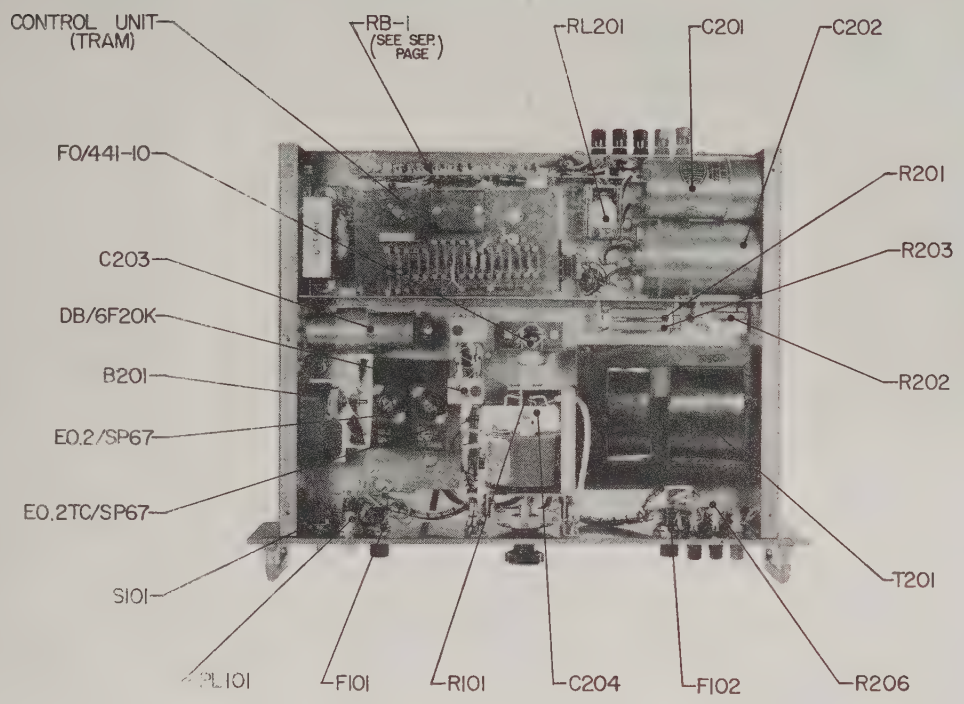


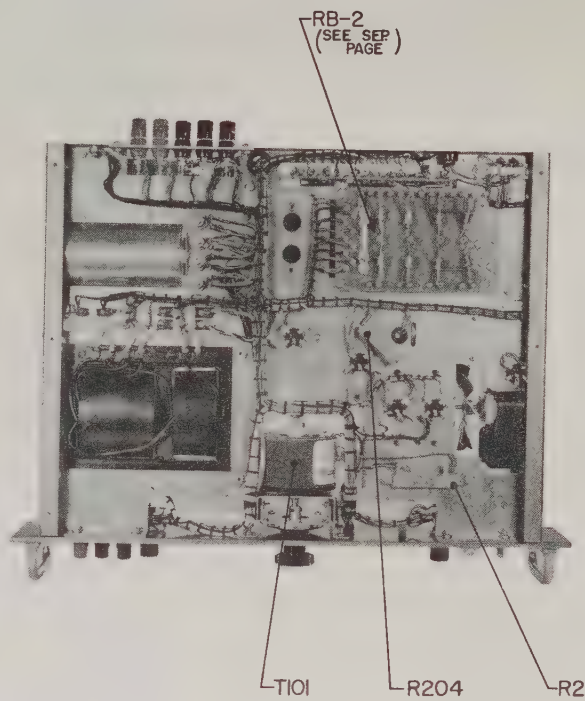


TERMINAL DESIGNATIONS OF CONNECTORS AND COMPONENTS



TERMINAL DESIGNATIONS OF CONNECTORS AND COMPONENTS

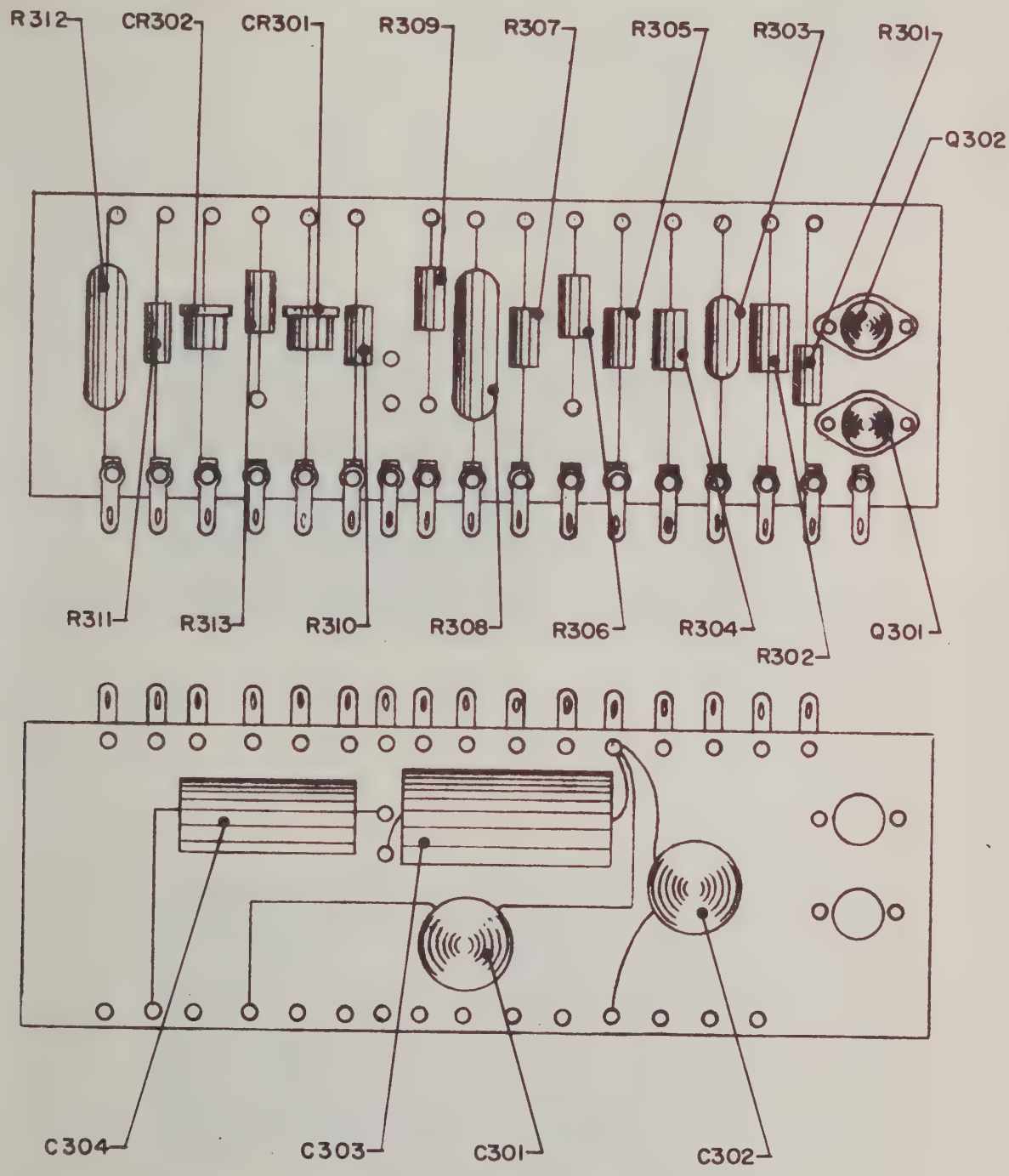




KEPCO LABORATORIES
FLUSHING NEW YORK

ITEM POWER UNIT	DES 5-12-61
	APPD JPK
MODEL SM-75-2	DFTM R.C
DWG No CM01348	CHKD

A



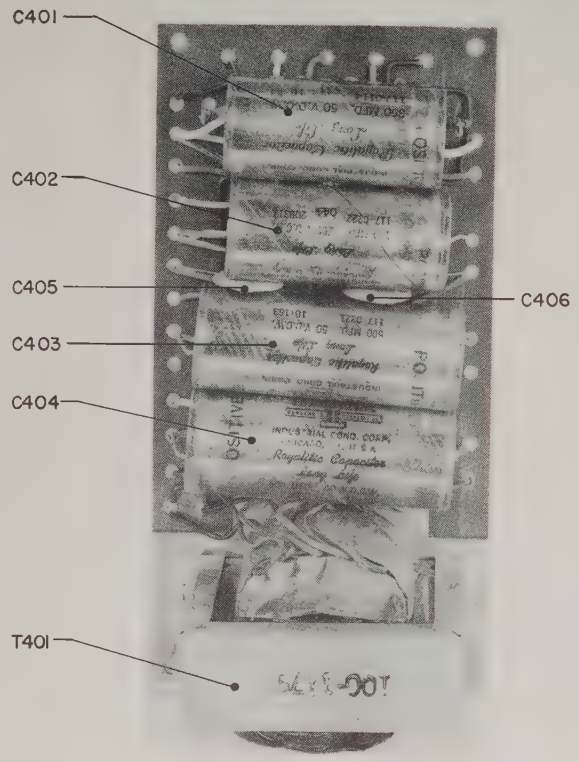
TOLERANCE UNLESS OTHERWISE SPECIFIED: FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ± 1/2°

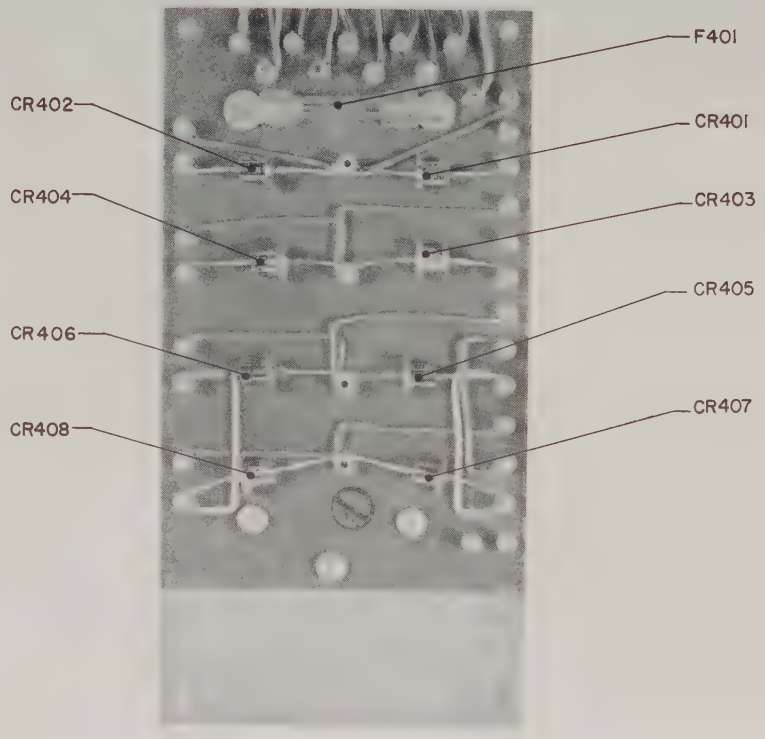
DRAWN	CHECKED	APPROVED	DATE
R C	T. Del		4-28-61
MODEL NO.		PART NO.	SCALE
SM-75-2			
TITLE			
RB-1			

KEPCO INC.
FLUSHING, N.Y.

DWG. NO. AM01279

DEFIANCE NO. 1000H 35731



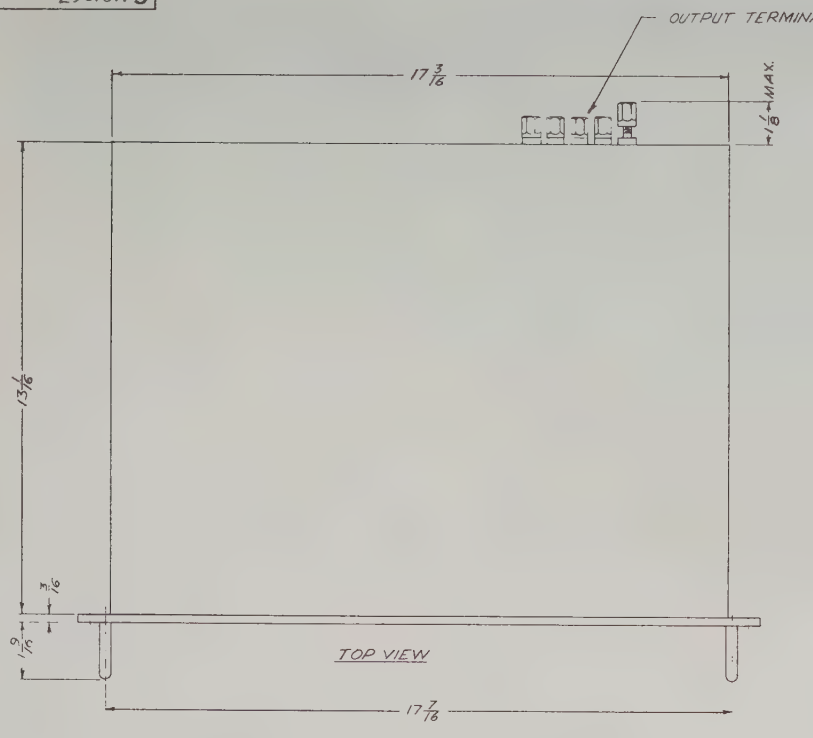


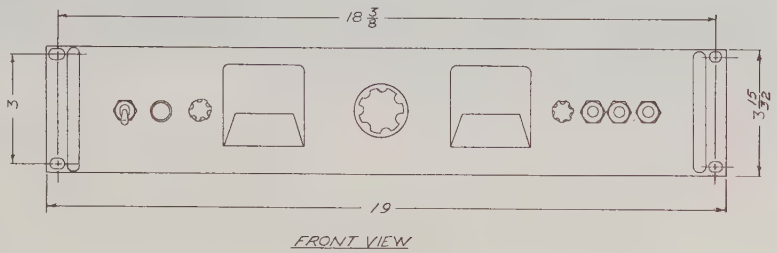
CORRECTIONS, IF ANY, APPEAR ON SHEET ATTACHED TO REAR COVER

KEPCO INC.	
FLUSHING NEW YORK	
ITEM RB-2	DES. 1-3-61
	APPD
MODEL SM—— SERIES	DFTM M.CEA
DWG. No BM00923	CHKD

CM01267

REVISIONS	DRAWN	CHKD.	APPD.	DATE





NOTES:
USED ON MODELS
SM-14-7
SM-36-5
SM-75-2
SM-160-1
SM-325 0.5

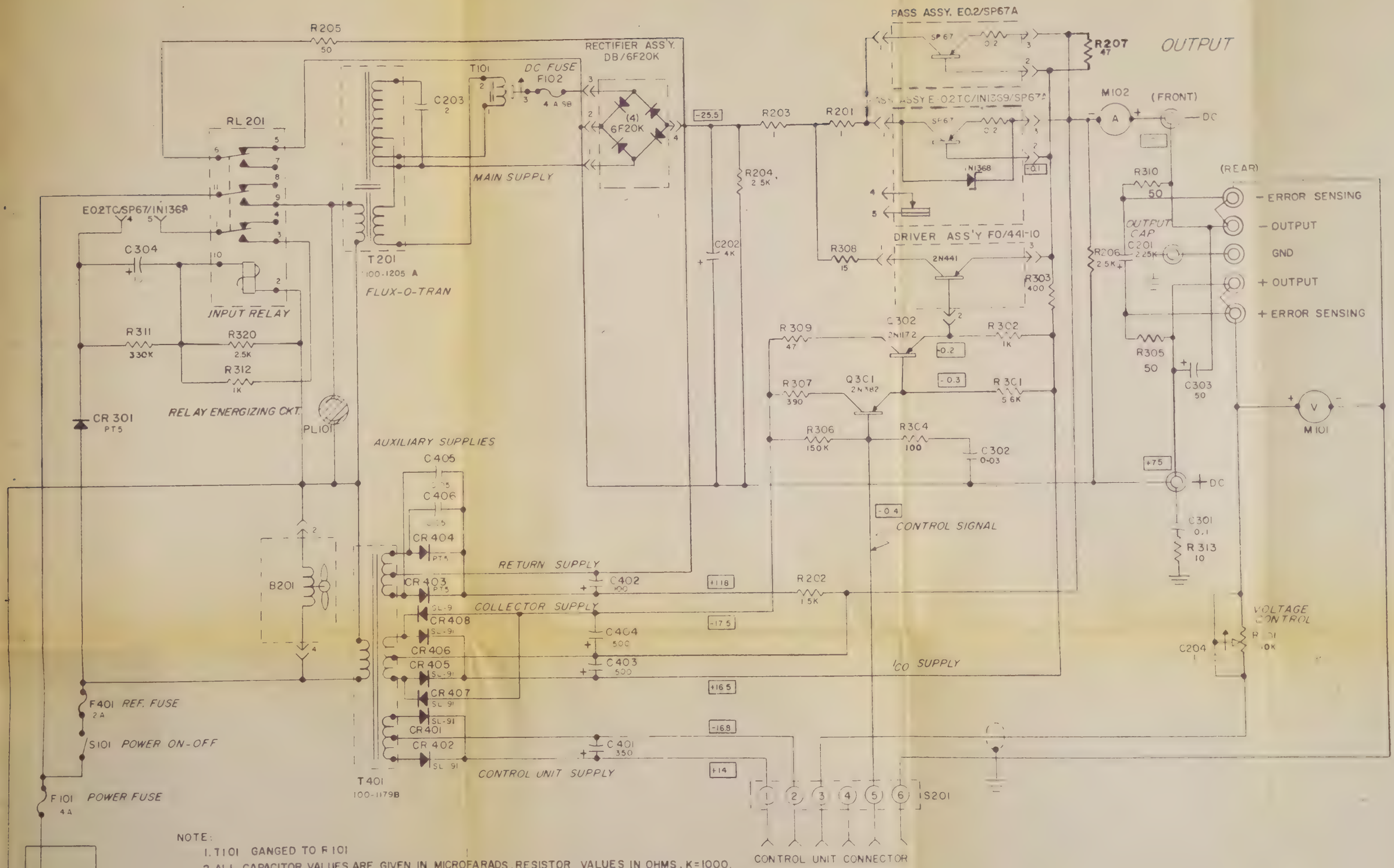
KEPCO INC. FLUSHING, N.Y.			
TITLE: OUTLINE DRAWING			
DRAWN: R A	CHECKED: TCH	APPROVED: G Bykerk	DATE: 4-19-61
MODEL NO.: 3½ SM SERIES		PART NO.	SCALE: HALF
DWG NO.: CM01267			

TOLERANCE UNLESS OTHERWISE SPECIFIED FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ± 1/2°

INPUT CONTROL

DC SOURCES

PASS CIRCUITRY



NOTE:

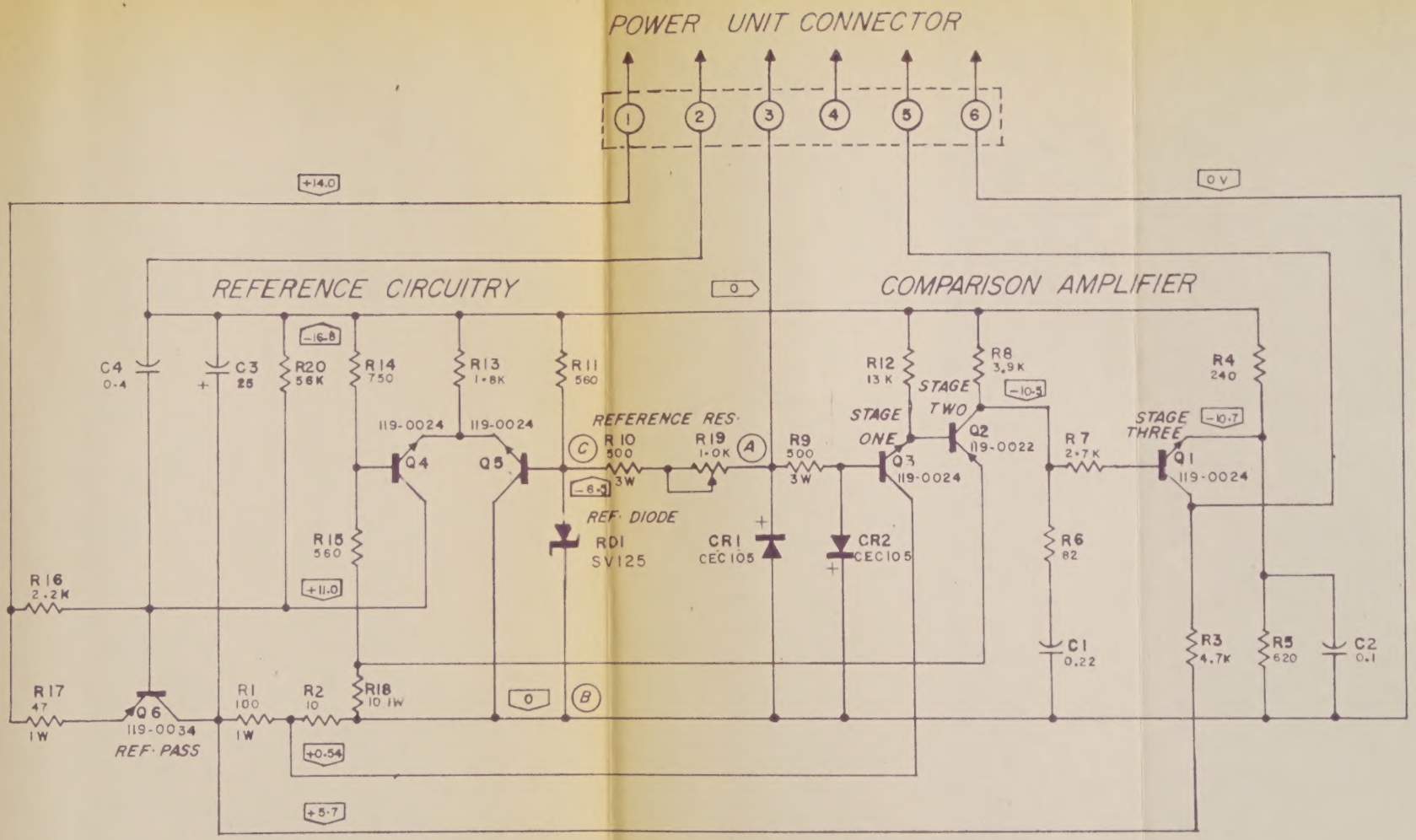
1. T101 GANGED TO F101
2. ALL CAPACITOR VALUES ARE GIVEN IN MICROFARADS, RESISTOR VALUES IN OHMS, K=1000.
3. ALL VOLTAGE READINGS TAKEN WITH 20,000 Ω/VOLT METER, WITH REFERENCE TO MINUS OUTPUT TERMINALS, UNDER THE FOLLOWING CONDITIONS:
   - A. LINE = 115 V.A.C.
   - B. D.C. OUTPUT = 75 VOLTS
   - C. OUTPUT CURRENT = ZERO.
4. VOLTAGES ARE TYPICAL AND ARE SUBJECT TO NORMAL COMPONENT TOLERANCE
5. METERS M101, M102 APPLY ONLY TO SM-75 -2 M AND SM-75 -2 MX MODELS.
6. ORDER REPLACEMENT PARTS BY KEPCO PART NUMBER PROVIDED IN PARTS LIST SECTION

CONTROL UNIT CONNECTOR SOCKET (WIRING SIDE)

KEPCO LABORATORIES

FLUSHING NEW YORK

TITLE: POWER UNIT	DES J.R.G.
	APPD A.F. 4-23-63
MODEL SM-75-2	DFTM M.CEA
DWG No C-M00800	CHKD J.P.K.



NOTES:

1- ALL VOLTAGES TAKEN UNDER CONDITIONS SPECIFIED ON MAIN SCHEMATIC

2- ALL CAPACITOR VALUES ARE GIVEN IN MICROFARADS, RESISTOR VALUES IN OHMS, RATED 1/2 WATT UNLESS OTHERWISE NOTED (K= 1,000 OHMS)

3- ORDER REPLACEMENT PARTS BY KEPCO PART NUMBER PROVIDED IN PARTS LIST SECTION.

KEPCO INC.
FLUSHING, N.Y.

TITLE			
CONTROL UNIT			
DRAWN	CHECKED	APPROVED	DATE
L.R.			10-2-63
MODEL NO.		PART NO	SCALE
TRAM 38			

DWG. NO BM02893

kepco Inc.®

131-38 SANFORD AVENUE • FLUSHING, N.Y. 11352 • Phone (212) IN 1-7000
TWX# 212-539-6623 • Cable Address: KEPCOPOWER NEWYORK

#146-0045-10/63-12M